## **Claims**

What is claimed is:

1. A method, comprising:

determining, at a headend node, terminal node characteristics of a media network;

based on the determined terminal node characteristics, selecting an algorithm and one or more control parameters for processing a fingerprint;

downloading the selected algorithm and one or more control parameters to a fingerprint control protocol; and

transferring the fingerprint control protocol to a terminal node.

- The method of claim 1, further comprising:
   utilizing, at the terminal node, the fingerprint control protocol to process the fingerprint.
- 3. The method of claim 2, wherein utilizing, at the terminal node, the fingerprint control protocol to process the fingerprint, comprises:

generating the fingerprint; and forwarding the fingerprint to the headend node for verification.

4. The method of claim 1, further comprising:

periodically checking the terminal node characteristics to adjust the selected algorithm and one or more control parameters.

- 5. The method of claim 1, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams.
- 6. The method of claim 1, wherein the fingerprint is a video fingerprint.
- 7. The method of claim 1, wherein the fingerprint is an audio fingerprint.
- 8. The method of claim 1, wherein the fingerprint control protocol is an application level control protocol.

## 9. A system, comprising:

a headend node, wherein the headend node determines terminal node characteristics of a media network, wherein the headend node selects an algorithm and one or more control parameters to process a fingerprint based on the determined terminal node characteristics, and wherein the headend node downloads the selected algorithm and control parameters to a fingerprint control protocol.

10. The system of claim 9, further comprising:

a terminal node, wherein the terminal node receives the fingerprint control protocol from the headend node and uses the fingerprint control protocol to process the fingerprint.

11. The system of claim 10, wherein the terminal node generates the fingerprint and forwards the fingerprint to the headend node for verification.

- 12. The system of claim 9, wherein the headend node periodically checks the terminal node characteristics to adjust the selected algorithm and one or more control parameters.
- 13. The system of claim 9, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams.
- 14. The system of claim 9, wherein the fingerprint is a video fingerprint.
- 15. The system of claim 9, wherein the fingerprint is an audio fingerprint.
- 16. The system of claim 9, wherein the fingerprint control protocol is an application level control protocol.
- 17. A machine-readable medium containing instructions which, when executed by a processing system, cause the processing system to perform a method, the method comprising:

determining, at a headend node, terminal node characteristics of a media network;

based on the determined terminal node characteristics, selecting an algorithm and one or more control parameters for processing a fingerprint;

downloading the selected algorithm and one or more control parameters to a fingerprint control protocol; and

transferring the fingerprint control protocol to a terminal node.

- 18. The machine-readable medium of claim 17, further comprising: utilizing, at the terminal node, the fingerprint control protocol to process the fingerprint.
- 19. The machine-readable medium of claim 18, wherein utilizing, at the terminal node, the fingerprint control protocol to process the fingerprint, comprises:

generating the fingerprint; and forwarding the fingerprint to the headend node for verification.

- 20. The machine-readable medium of claim 17, further comprising:
  periodically checking the terminal node characteristics to adjust the selected
  algorithm and one or more control parameters.
- 21. The machine-readable medium of claim 17, wherein the fingerprint control protocol includes data that is packed into one or more MPEG elementary streams.
- 22. The machine-readable medium of claim 17, wherein the fingerprint is a video fingerprint.
- 23. The machine-readable medium of claim 17, wherein the fingerprint is an audio fingerprint.
- 24. The machine-readable medium of claim 17, wherein the fingerprint control protocol is an application level control protocol.